

INSTRUCTIONS *for the*
ROBERTSHAW



Model X

The Robertshaw



"The Dependable Oven Heat Control"

What It Does!

- 1 Automatically maintains the correct oven temperature. You do not have to stay in or even near the kitchen when cooking.
- 2 Saves more gas than its cost per year and eliminates loss of foods.
- 3 Eliminates guess-work and the pies, cakes, biscuits, cookies, etc., are just right every time.
- 4 Assures the roasting of all kinds of meat and fowl—rare, medium, or well done—deliciously and without a single failure.
- 5 Makes possible the boiling of cereals, soups and vegetables in the oven at the same time you roast meats and bake desserts.
- 6 Also the canning of fruits and tomatoes in the oven, the scientific way.
- 7 And the making of all peach butter, apple butter, tomato butter, etc., in the oven. No stirring necessary.
- 8 Provides for the automatic cooking of a complete meal in the oven at one time without attention. You can leave the house for a period of three to five hours and return to find the whole meal cooked perfectly, ready for serving. Replaces the fireless cooker.
- 9 Provides for the drying and sterilizing of dishes in the oven, giving them a clean, polished surface—affording a warming closet of large capacity.
- 10 Requires no experience and, having no parts which can deteriorate, will operate correctly for the entire life of the range.

DON'T SPEND YOUR TIME IN THE KITCHEN

Let the Robertshaw do the Cooking

THE ROBERTSHAW OVEN HEAT CONTROL

CONCERNING RECIPES

There are so many excellent recipe books published that it is therefore not the purpose of this booklet to list various recipes, but to place in the hands of the home manager complete, approved Time and Temperature Cooking and Canning Charts for all classifications of foods.

Cooking authorities are unanimous in advocating that foods are best cooked at a certain temperature for a definite length of time, and by having the Robertshaw Oven Heat Control on your gas range and being guided by the Time and Temperature Charts in this booklet you can cook and can foods that are scientifically correct and delicious, without a single failure.

REQUIRES NO EXPERIENCE

In using the Robertshaw Oven Heat Control and the Time and Temperature Charts, no experience whatever is required. You simply prepare the foods or mix the ingredients in the usual way, or follow any reliable recipe book, and then refer to the Chart for the cooking directions. In this Chart you will find listed the food to be cooked (or a similar one) and the suggested temperature and the length of time given for cooking each class of food.

The Cooking and Canning Charts have been compiled very carefully by experts. It must be remembered, however, that the times and temperatures given in this book are the result of experiments in which many different gas ranges were used, and in which other conditions, such as the kind of gas, the installation of the range, and the model of the range, also differed. Consequently, to meet the exact conditions of your range, the times and temperatures may have to be varied slightly. This can be determined without difficulty after you have used your new range for a short period.

THE ROBERTSHAW OVEN HEAT CONTROL

The Robertshaw Oven Heat Control is so simply and durably constructed, having no parts which can deteriorate or wear out, that it will control the oven temperature accurately throughout the entire life of your gas range, and it is recommended by gas companies, stove dealers, home economics bureaus and gas range manufacturers everywhere.

AUTOMATIC COOKING • Directions

LIGHTING THE OVEN

In lighting the oven be sure that the oven burner cock is open full because the Oven Heat Control takes care of the gas supply, and it is necessary only to open the oven gas cock when lighting the oven

burner and to turn it off when the cooking is completed. The Oven Heat Control, throughout the entire cooking process, will automatically increase or decrease the oven burner flame to the proper volume for maintaining the set oven temperature.

PREHEATING THE OVEN

As most foods must never be put into the oven before it is heated to the set temperature, time will be saved if the oven is lighted while the foods are being prepared. For roasts and whole meal cooking, *preheating is unnecessary.*

The time given in the Cooking Chart for preheating the oven is generally sufficient, but it is easy to determine when the oven is fully heated, for just as soon as the set temperature is reached, the Oven Heat Control will decrease the size of the oven burner flame.

TWO CLASSES OF COOKING

The Robertshaw Oven Heat Control can not only be used in cooking single articles of food, such as ordinary baking or roasting, but in addition, any entire meal which can be cooked in a fireless cooker can be cooked in a gas range oven equipped with the Oven Heat Control. The Robertshaw Oven Heat Control, therefore, makes one appliance in the kitchen serve as both gas range and fireless cooker.

COOKING SINGLE FOODS

Baking and roasting are greatly simplified by the use of the Oven Heat Control, and correct results are assured in advance by cooking according to the time and temperature indicated in the cooking chart. The Robertshaw Oven Heat Control roasts and bakes deliciously and eliminates the constant supervision.

ROASTING

As the result of tests conducted throughout the country by impartial authorities, the best way to roast meats is now known to be very different from what was formerly thought proper. Searing is unnecessary. The tenderest, juiciest roasts are obtained by using the low temperature method recommended in this booklet. Furthermore, this method reduces shrinkage to a minimum. While covering the roast is satisfactory, we recommend roasting in uncovered pans.

Preheating, searing, basting are unnecessary. Roasts should be placed in the pan with the fat side up, and no water added.

WHOLE MEAL COOKING

Whole meals, consisting of meats, fish and vegetables, cereals, macaronies, puddings, etc., can be prepared and cooked, with practically no attention or time spent in the actual cooking. A person may leave the house for a period of up to five hours and return to find the meal cooked perfectly, ready for serving.

To cook entire meals in a temperature controlled oven, no previous experience is necessary, as only a few rules are to be observed. For the veg-

etables and other foods, simply prepare these, and place in the oven in covered pans for the required length of time. Do not baste or add water during the cooking, as the juices and flavors will be retained in the covered pans.

In whole meal cooking, it is never necessary to open the oven doors nor change the temperature setting.

In cooking vegetables in covered pans for long periods, very little water should be added, especially to potatoes.

Pastries, Biscuits and similar fast cooking foods should be cooked separately and not with whole meals, as they require but a short time to cook and at a very high temperature. If prepared in advance, pastries, biscuits, etc., can be baked while the rest of the meal is being served.

To cook a one- and one-half hour meal: Place the foods in tightly covered pans (for meats, see 'Roasting'), set the Oven Heat Control at 350° and remove after one and one-half hours.

For a three hour meal, the same instructions apply except that the temperature must be set at 275°.

For a four or five hour meal, the same instructions apply except that the temperature must be set at 250°.

A few suggestions for whole meals, showing different articles of foods, will be found on page 6.

POULTRY AND FISH

Complete instructions for roasting poultry and baking fish are given at the bottom of the Cooking Chart, pages 4 and 5.

SOUPS AND CEREALS

Soups, cereals and foods of like nature can be cooked in the oven safely over night, with the Control Pointer set at 250°, or for periods as long as ten hours, without attention.

BROILING OR TOASTING

Broiling or toasting can be done either in the baking oven or the broiling oven with the control pointer set at or beyond the 550° mark. If done in the broiling oven, set the pointer at or beyond 550° and regulate the height of the flame by operating the burner cock by hand. In insulated ranges, if the control pointer is set at 550°, the burner flame will reduce when the oven temperature attains 550°. It is therefore advisable to set the pointer as far beyond the 550° mark as possible. Otherwise, to maintain the full burner flame, it may be necessary to open the oven door.

PEACH BUTTER, APPLE BUTTER, ETC.

Peach butter, apple butter, tomato butter, etc., can be made in the oven and the Oven Heat Control eliminates the constant tedious stirring. Prepare in the usual way and place the kettle in the oven with the pointer set at 250°. No stirring throughout this long cooking process is necessary as the butter will not burn or stick to the vessel.

(Turn to page 6)

COOKING CHART

In preparing the foods use any reliable recipe book, and if the article of food being prepared is not listed in this chart, select a similar food and follow the time and temperature given for it. Carefully read the directions for lighting and preheating the oven given on pages 1 and 2 of this booklet.

ARTICLE OF FOOD	Set to	Preheat Oven	Bake or Roast	Reset To	Bake or Roast Additional Time
BREAD, BISCUITS, Etc.		Preheat oven to the set temperature. If automatically from a full flame to a smaller one, temperature control, disregard instructions for pre			
Bread, Yeast	350° F.		45 to 60 min.		
Baking Powder Biscuits	450° F.		12 to 15 min.		
Yeast Biscuits	400° F.		20 min.		
Muffins	400° F.		25 min.		
Pop-Overs	450° F.		20 min.	350° F.	20 min.
COOKIES, Etc.					
Corn Cake	400° F.		20 to 25 min.		
Ginger Bread	350° F.		35 min.		
Vanilla Cookies	400° F.		10 min.		
Drop Bran Cookies	400° F.		12 min.		
Molasses Cookies	375° F.		15 min.		
CAKES					
Plain Cake (sheet or cup)	375° F.		30 min.		
Loaf Cake	350° F.		45 min.		
Layer Cake	375° F.		20 min.		
Fruit Cake (large)	275° F.		3 to 4 hrs.		
Sponge Cake	325° F.		1 hr.		
Angel Food Cake	300° F.		1 hr.		
PIES					
Pastry Shell	425° F.		15 min.		
Apple Pie	425° F.		35 to 45 min.		
Rhubarb Pie	425° F.		35 to 45 min.		

BRIEF EXPLANATION OF THE COOKING CHART

This cooking chart has been compiled very carefully and covers practically every class of food. If the food to be cooked is not listed, select a similar food and follow the time and temperature given for it. Move the dial of the Robertshaw to the temperature mark indicated in the first column opposite the article of food to be cooked, open the oven gas cock full, light the burner and allow the oven to preheat for the time specified in the second column. The foods can be prepared while the oven is preheating, and when the oven is fully heated, put the food in the oven and allow it to cook for the length of time given in the third column.

Some articles of food must be cooked at two temperatures, first at a high temperature and then at a low temperature, and in the fourth column you will find the lower temperature to which the Robertshaw should be reset when required. The fifth col-

Goose Berry Pie	425° F.	Before placing the foods in the oven to cook or bake be sure that the oven is preheated to temperature, the burner will reduce the temperature. See Special Instructions for Roasting.	35 to 45 min.	325° F.	35 min.
Cherry Pie	425° F.		35 to 45 min.	325° F.	30 min.
Open Cross Out Pie	425° F.		20 min.		
Pumpkin Pie	425° F.		20 min.		
Custard Pie	425° F.		20 min.		
CUSTARDS, Etc.					
Meringue	300° F.		15 min.	400° F.	25 min.
Puff Paste	450° F.		10 min.		
Individual Custards	325° F.		40 min.		
Large 1 qt. Custards	325° F.		75 min.		
POTATOES					
Small Potatoes	500° F.		25 min.		
Medium Potatoes	500° F.		40 min.		
Large Potatoes	500° F.		60 min.		
CASSEROLE DISHES					
Casserole Uncooked Food ..	350° F.		2½ to 3 hrs.		
Scalloped Dishes	500° F.		12 min.		
BEEF ROASTS					
(Uncovered—Boned and Rolled)					
Rare	325° F.		18 min. per lb.		
Medium	325° F.		22 min. per lb.		
Well done	325° F.		30 min. per lb.		
MISCEL. ROASTS					
Loin of Pork Roast ..	325° F.		25 min. per lb.		
Fresh Ham Roast	325° F.		30 min. per lb.		
Loin of Veal Roast	300° F.		25 min. per lb.		
Lamb Roast (young)	325° F.		25 min. per lb.		
Spring Lamb (rare)	325° F.		20 min. per lb.		
Yearling Lamb (cov'd pan)	325° F.		25 min. per lb.		

Poultry: Time for roasting poultry is 20 minutes to the pound.

Fish: Best temperature for baking fish is 350 degrees F. Time required for baking will depend upon the size and thickness of the fish—varying from 20 minutes to about one hour.

Searing: Meat may be seared, but it is not necessary, and a constant temperature has been found to be the simplest and most satisfactory procedure. It is also more economical.

umn shows the additional time that the food should be cooked at the lower temperature.

COOKING EXAMPLES

BAKING POWDER BISCUITS

Set the dial at 450°. Turn on the gas and light the oven burner. After 20 minutes, place the biscuits in the oven and allow to bake from 12 to 15 minutes.

ROASTS (6 lb. medium)

Set the dial of the Robertshaw at 325°. Turn on the gas and light the oven burner. Then place the roast in an open pan with fat side up, and sprinkle thoroughly with salt and pepper to suit. Roast for 2 hours and 12 minutes, or 22 minutes to the pound.

DRYING DISHES IN THE OVEN

Dishes and silverware can be dried in the oven with the control pointer set at 250°.

HINTS FOR CAKE BAKING

All cakes can be divided into two classes, sponge and butter cakes. After baking sponge cakes, pans should be inverted and cake should hang in pan until cool. Do not turn butter cakes. They should cool for 5 to 10 minutes before being removed and should be turned out on wire racks.

Note that small cakes and layer cakes require higher temperatures.

Never jar or move a cake until baking is entirely completed.

Pans for angel and sponge cakes should not be greased.

If cakes are not brown enough to suit, raise the temperature 25 degrees for the last few minutes of baking.

Heavy cakes result from too much sugar or butter. To prevent coarse grain cakes, do not use too much raising ingredients, cream well the butter and sugar and beat the batter sufficiently.

A solid or bready cake results from too much flour.

The times given for cake baking must be varied according to the depth of the pan; deeper pans require longer periods.

A FEW SUGGESTIONS FOR WHOLE MEALS

Many different articles of food can be combined for whole meal cooking in the oven and your own experience and preference can dictate your choice of foods for the whole meal.

A number of different foods are listed below which may serve as a guide for your whole meal cooking.

For a one- and one-half hour meal, the Robertshaw should be set at 350°, for a three hour meal, set at 275°, and for a four or five hour meal, set at 250°.

MEATS

Roast Chicken
Stewed Chicken
Fried Chicken
Casserole Chicken
Roast Ribs of Beef
Beef Pot Roast
Meat Stews
Beef Loaf
Stuffed Steak
Stuffed Fish
Baked Fish
Roast Ham
Scalloped Ham
Roast Lamb

MEATS

Roast Pork
Pork Tenderloins

VEGETABLES

Roast Potatoes
Brown Potatoes
Pan Roasted Potatoes
French Fried Potatoes
Scalloped Potatoes
Mashed Potatoes
Roast Sweet Potatoes
Candied Sweet Potatoes
Carrots
Peas

VEGETABLES

Navy Beans
Lima Beans
Green Beans
Wax Beans
Asparagus
Onions
Tomatoes
Celery
Macaroni and Cheese
Spaghetti
Squash
Beets
Scalloped Corn
Turnips
Parsnips

DESSERTS

Bread Pudding
Lemon Pudding
Rice Pudding
Boiled Rice
Stewed Prunes
Stewed Apricots
Stewed Figs
Stewed Peaches
Apple Brown Betty
Apple Tapioca Pudding
Fig Tapioca Pudding
Baked Apples
Apple Sauce
Rhubarb Sauce
All uncooked
Desserts and Fruits

Due to the temperatures at which whole meals are cooked in the oven being higher than those recommended for roasting, it may be desirable to cover the roast when cooking it with a whole meal.

OVEN CANNING INSTRUCTIONS

The oven is a quick, economical, convenient means for canning which may be relied upon. If directions are followed, not one jar canned should spoil, and the foods should retain their natural coloring, shape and flavor.

In this booklet we give directions for the oven canning of acid foods only, such as fruits and tomatoes. Although the oven canning of non-acid foods is being done successfully, it has not yet been endorsed by the Bureau of Home Economics of the United States Department of Agriculture.

1. Use only fresh fruits and vegetables.
2. Inspect jars to make sure none have nicks or imperfections that would prevent a perfect seal.
3. Use only new lids with composition attached, or new rubber rings, a fresh supply each season.
4. They should be dipped in boiling water before using.
5. All jars and covers should be thoroughly washed and scalded.

As the first step for oven canning of fruits and tomatoes, arrange the utensils; two large pans of boiling water, one for scalding the jars, lids, rubbers, etc., and one for scalding the products if they are to be packed hot. All products to be canned should be washed thoroughly and prepared for cooking. Those with earth clinging to them should have special attention and be thoroughly washed and cleaned. Peaches, apricots and tomatoes have a skin which must be removed before packing them into jars, and this is best done by immersing the product in boiling water, using a wire basket, colander or square piece of cheese cloth. Allow the fruit to remain in the boiling water just long enough to loosen the skin, then dip in cold water and peel before packing in jars.

In preparing pineapple for canning, pare and remove the eyes. Then cut up the pineapple, removing the hard center core.

Pack such fruits as raspberries, cherries, blackberries, etc., into scalded jars immediately after being washed and the boiling sirup poured over them.

The sirup for canning fruits can be thin, medium or thick, depending upon the sweetness of the fruit itself. For a thin sirup, bring one part of sugar and three parts of water to the boiling point. For a medium sirup, one part of sugar to two parts of water, and for a thick sirup, one part of sugar to one part of water.

Fill the jars to within one inch of top and place the jars in the oven two inches apart, directly on the oven racks, and not in contact with each other, or with the oven walls. It is not necessary to place the jars in water. Immediately upon removal from the oven seal the jars tightly and then turn upside down until cool.

If jars equipped with caps or lids having composition attached, and which require no rubber rings, are used, they should never be turned upside down while cooling and the jar is sealing, nor should the screw band be turned down after the jar is cooled and sealed. These jars are tested for seal as follows: After the contents have cooled, take a spoon and gently tap the lid. If properly sealed, it will give a clear ringing note and be slightly concave (curved inwardly) due to the vacuum inside. If not properly sealed, the

sound will be dull and low in key, in which case simply process again, using approximately one-fourth to one-third the regular processing time, and your food is saved. Food touching cap gives slightly dull sound but different from jar that is not sealed. Store in cool, dry place.

Keep in a dark place where it is cool but not in a place where the products are liable to freeze.

ROBERTSHAW OVEN CANNING CHART

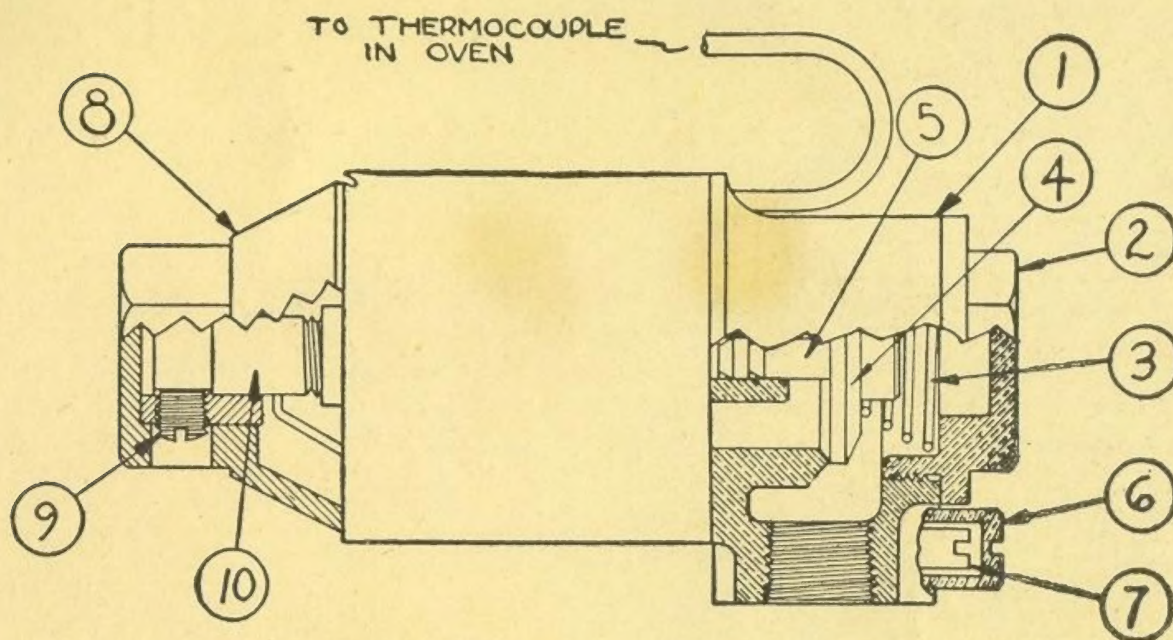
FRUITS AND TOMATOES

List of Products	Preparation	Filling and Handling Jars	Processing Period in the Oven
Apples, whole	Cook in sirup until somewhat transparent. Pack hot. Cover with sirup.	Fill jars to within 1 inch of top with liquid. Adjust scalded rubbers and partly clamp covers. if using caps or lids with composition attached, put on the cap and adjust the wire clamp, or, if the two-piece cap is used, put the lid in place with composition next to the glass and screw the band tight.	250° for 50 min.
Apples, quartered or sliced.	Pack in jars; cover with boiling sirup.		250° for 1 hour.
Apricots	Immerse in boiling water until skins slip. Cold dip, peel, pit and cut. Pack in jars, add boiling sirup.		250° for 1 hour.
Blackberries, Blueberries, Currants, Dewberries, Huckleberries, Loganberries, Raspberries.	Pack in jars. Fill with boiling hot, medium sirup.		250° for 1 hour.
Cherries	Pack in hot jars. Cover with boiling sirup of desired sweetness.		250° for 1 hour.
Gooseberries	Pack in jars, fill with boiling thick sirup.		250° for 1 hour.
Peaches	Immerse in boiling water until skins slip. Cold dip, peel, pit, and cut. Pack in jars, add boiling sirup.		250° for 1 hour.
Pears	Pare, cook 4 to 8 minutes in boiling medium sirup. Pack hot in jars; fill with boiling sirup.		250° for 1 hour.
Pineapple	Pare and core. Cut up. Pack, using boiling thin sirup.		250° for 1 hour.
Plums	Prick surface of skin. Pack, using boiling medium sirup.		250° for 1 hour.
Rhubarb	Cut up. Measure and add one-fourth as much sugar. Bake in covered dish until tender. Pack hot.		250° for 30 min.
Strawberries	Add 1 cup of sugar and 2 tablespoonfuls of water to each quart. Simmer 15 minutes. Stand over night. Pack and process.		250° for 50 min.
Tomatoes	Scald, peel, quarter and tamp in jar. Add 1 teaspoonful of salt to each quart jar.		250° for 50 min.

The time periods above are based on the use of quart glass jars. For pint glass jars, five minutes less time may be used.

Instructions on the MODEL X

ROBERTSHAW OVEN HEAT CONTROL



*This drawing shows a Cross-sectional View of the
Model X ROBERTSHAW OVEN HEAT CONTROL*

THE MINIMUM BURNER FLAME PILOT AND THE INDEPENDENT PILOT MUST BE PROPERLY ADJUSTED BY THE PERSON INSTALLING THE RANGE. NO OTHER ADJUSTMENTS SHOULD BE MADE UNLESS ABSOLUTELY NECESSARY. AS THESE FEATURES HAVE BEEN TAKEN CARE OF AT THE FACTORY.

THE MINIMUM BURNER FLAME PILOT can be adjusted when the oven is either cold or hot. First ignite the oven burner. Then move dial (8) as far below 70 mark as possible. This closes the valve. Whatever gas is then passing to the burner is passing through the By-Pass and should burn about $\frac{1}{8}$ in. high over entire burner. If the flame is too high or too low, unscrew protecting cap (6) and, with a screwdriver, turn adjusting valve (7) slowly, either to the right or left, until the proper size Minimum Burner Flame is secured. Then replace protecting cap (6). If you cannot reduce the Minimum Burner Flame to the proper $\frac{1}{8}$ in. size, clean valve parts as described in the last paragraph of these instructions. When the above adjustment has been made, the oven burner flame will never go out completely as long as the oven burner gas cock is turned on.

THE INDEPENDENT PILOT is the small yellow flame that burns near the oven burner. It is a precautionary pilot and serves to relight the burner in case the Minimum Burner Flame Pilot is improperly adjusted. It is lighted with the burner and extinguished when the burner is shut off. By turning small screw at end of pilot, the flame should be adjusted to about $\frac{3}{4}$ in. in length.

THE ADJUSTMENT OF THE TEMPERATURE SETTING CAN BE DONE WHEN THE OVEN IS EITHER COLD OR HOT.

WHEN THE OVEN IS COLD, ignite the oven burner, then move dial (8) as far below 70 mark as possible. This closes the valve. With a screwdriver turn adjusting valve (7) until there is no gas going to burner. Move dial back to 200° or 300° and reignite burner. Then, before the oven has a chance to heat, move dial slowly toward 70 mark. The oven burner should be just on the point of going out when the position of dial (8) agrees with the room temperature. If it does not agree with the room temperature, loosen set screw (9) on side of dial (8), and remove dial (8) carefully so that dial shaft (10) does not turn. Then replace dial (8) on dial shaft (10) so that dial reading and room temperature do agree. Tighten set screw (9) securely. Then adjust the Minimum Burner Flame Pilot as described in second paragraph.

WHEN THE OVEN IS HOT, and three consecutive readings of an oven thermometer five minutes apart show a temperature variation of not more than 5°, the oven temperature has settled. If, after the oven temperature has settled, the reading of an oven thermometer does not agree with the temperature setting of the Robertshaw, simply loosen set screw (9) on side of dial (8), and remove dial (8) carefully so that dial shaft (10) does not turn. Then replace dial (8) on dial shaft (10) so that dial reading and thermometer do agree. Then be sure to tighten set screw (9) securely.

TO CLEAN VALVE PARTS, with a wrench unscrew hexagon cap (2), then remove spring (3) and disc (4). See that gland pin (5) moves freely. With a soft dry cloth, clean spring, disc and seat with which disc engages. Then replace the disc and spring in their original positions, and screw cap on securely.

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